City of Bloomington, Indiana

Request for Information

for

Partnership for Deployment of a Citywide Fiber-to-the-Premises (FTTP) Network

Issued: March 31, 2016

City of Bloomington | FTTP RFI

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I. Introduction

The City of Bloomington, Indiana ("the City") issues this Request for Information (RFI) to gauge the interest and proposed approaches of for-profit and nonprofit companies in forming public—private partnerships with the City to make Gigabit-class broadband available to all Bloomington homes and businesses over privately or publicly-owned infrastructure.

Bloomington is an attractive place to live, work, and visit. Home to Indiana University's flagship campus ("IUB"), Bloomington is an exciting mix of world cultures, academic and artistic enthusiasm, and Hoosier hospitality—prime ingredients to foster collaboration and innovation for building a knowledge economy. The booming local technology sector has been fueled by elearning, bio-informatics, cybersecurity, and the country's first School of Informatics.¹

Much of what is truly special about Bloomington is what we have created here ourselves: restoration and revitalization of the downtown, unique local businesses, a growing technology sector, and a thriving arts community are among the City's many wonderful features. The future of Bloomington rests on our ability to continue to attract and retain highly-skilled residents and build on and further harness our community's natural energy and creativity to make our City an even greater place to live. Ultra-high-speed Internet access is essential to these goals. Internet access is the electricity of the 21st century and is vital for jobs, education, and healthcare. Bloomington must ensure that our citizens and businesses have access to this critical resource.

The City envisions a fiber-to-the-premises ("FTTP") deployment that enables ubiquitous Gigabitclass broadband access throughout the City's corporate boundaries, which will enhance the broadband connectivity of the City's residents, businesses, municipal facilities, and community anchor institutions ("CAI") by expanding the range and quality of available broadband and data transport services.

The City has initiated this RFI to identify one or more potential partners to enable or directly provide high-capacity broadband services over a fiber network to end users within the City. Responses to this RFI should state how the respondent's approach will result in a financially sustainable business model that furthers the City's goals of ensuring that all residents and businesses have access to affordable, market-leading broadband services that can easily and inexpensively scale to provide higher-speed services as demand for bandwidth increases.

The City seeks input from potential partners regarding the terms and conditions under which they would participate in such a project. We seek partners who will consider a variety of business

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¹ "School of Informatics and Computing," Indiana University Bloomington, http://www.soic.indiana.edu/about/, accessed March 2016.

models that share technological and operational responsibilities and financial risk between the partners and the City in innovative ways.

We encourage respondents to share their expertise, which may be used to shape the direction and form of the network. Respondents may work together to respond to this RFI. The City is open to creative solutions that will maximize investment while providing reliable and high-quality services to meet its citizens' needs.

We welcome the responses of all prospective partners, including incumbent service providers, as well as competitive providers, nonprofit organizations, public cooperatives, and entities that are not traditional Internet service providers (ISP) but are interested in acting as a partner in offering service under innovative business models. Nontraditional providers may respond as part of a partnership with an ISP, or may provide separate responses outlining their approaches.

The City will assess responses based on the respondents' experience, how well the responses address the City's objectives, how the proposed business model balances and shares risks and rewards, and other factors. The City may provide more detailed information on available City assets and ask one or more respondents to refine their responses. Following the evaluation of responses the City may begin negotiations with preferred RFI respondent(s), issue a more detailed Request for Proposal (RFP) relating to the City-initiated project, issue an RFP to selected RFI respondents, cancel or delay plans to deploy an FTTP network, or choose another direction that is deemed in the community's best interest.

Responding to the RFI is not a guarantee of a contract award. Further, there is no guarantee an RFP will be developed as a result of this RFI. The City reserves the right to withdraw the RFI or any subsequent RFP, or to decline to award a contract.

All respondents must follow the instructions and provide all requested material. Failure to follow instructions is grounds for rejection of the response. All respondents must complete the attached responsibility matrix (Appendix A), financial responsibilities questions (Appendix B), and non-disclosure agreement (Appendix C), and submit each in the format (structure and page limitations) specified in the RFI instructions.

II. City Vision

Our vision is to provide a world-class community communications infrastructure to Bloomington for the 21st century and beyond. Broadband is critical infrastructure, on par with roads, water, sewer, and electricity. Every home, business, nonprofit organization, government entity, and educational institution within the City's boundaries should have the opportunity to connect affordably, easily, and securely. Providing equal access to communications infrastructure and

service is essential to promoting equal opportunity in education, business, healthcare, and all other aspects of day-to-day life.

Citywide broadband is an important driver of lowering business costs, attracting and retaining highly skilled residents, and creating sustainable new jobs in an entrepreneurial economy based on innovation and creativity. Robust residential and institutional connectivity will also expand opportunities for local students in K–12 and beyond, and enable more open government and improved and democratic engagement.

We intend to empower our citizens and local businesses to be network economy producers—not just consumers of network information and data services. Further, we intend to provide our stakeholders with the broadband capacity, affordability, and local, regional, and national connectivity they need to compete successfully in the global marketplace.

Upgraded infrastructure will also allow the City government to be more innovative in the ways it provides municipal services and manages municipal operations. We intend to use the citywide network to advance Bloomington's ability to become a "Smart City" that is better able to deliver services to meet community needs, and that delivers those services more efficiently. In combination with other advanced technologies like sensors or smart devices, the network could help improve public safety, public works, public transportation, and other key municipal services—and could improve the quality of life for Bloomington residents and businesses.

Bloomington's broadband initiative will be shaped by the community's values. The City seeks a partner(s) ("Partner") to operate fast, affordable broadband Internet and data services over publicly or privately constructed fiber optics to meet the City's broadband goals. City officials have prioritized pursuing the deployment of:

- 1. A **community-wide** fiber-to-the-premises (FTTP) network that will provide complete community coverage—connecting every home and business throughout the City with Gigabit-class bandwidth and leaving no part of the City behind.
- A community-controlled network that ensures the ability of local residents and businesses to affordably connect to robust and reliable broadband services, is not subject solely to the commercial priorities of one or more private ISPs, and operates under a business model that accepts, accelerates, and encourages competition among service providers.
- 3. A **financially sustainable network** that does not impose an undue economic burden on the City and that can adapt to changing circumstances. As with other types of critical infrastructure (streets, for example), the network does not necessarily need to generate net revenue, but it must be based on a sustainable long-term operating model.

One of our key priorities is that all members of the community have access to robust, affordable broadband service. The FTTP network should be built everywhere with no redlining or "cherry picking" (i.e., building only to the most affluent areas of a community where there is a higher likelihood of obtaining subscribers willing to pay for service, and thus seeing a quicker return on capital investment). Citizens in low-income neighborhoods and housing developments are particularly vulnerable, and broadband is important to help level the playing field. As the world becomes increasingly connected, broadband access is key to education, job training, and even access to one's own medical records.

We understand that a community-wide FTTP network may seem implausible for some providers, and we are prepared to work with the successful respondent(s) to make this an attainable goal. Respondents that believe this goal to be a barrier to their ability to successfully partner with the City should clearly articulate their reasoning, and describe how they may provide a "goodenough" contingency plan for community-wide FTTP access. We stress that community-wide access is an important component of our vision, but the City is willing to consider creative alternatives to community-wide FTTP.

The City will consider a range of construction, operation, and ownership models for the FTTP network. The City and selected Partner(s) will collaboratively determine the most mutually beneficial partnership structure, which may include cost-sharing, infrastructure leasing, and profit-sharing arrangements. The City is prepared to consider various business models, which could include, but are not limited to, the following scenarios:

- Public construction and private operation and maintenance of fiber optic infrastructure, and private operation of services over the public infrastructure;
- Private provisioning of services over public infrastructure;
- Public provisioning of services over public infrastructure;
- Publicly or privately constructed open-access infrastructure that allows other qualified providers to offer service over the network; or
- Private construction, operation, and maintenance of privately owned fiber optic infrastructure.²

The City will also consider any combination of these models as well as alternative suggestions proposed by respondents.

² Respondents should clearly indicate how this approach achieves the City's partnership and connectivity goals.

We envision significant progress toward an operational network in one to two years, and the launch of network services or additional major milestones by 2018.

III. Background: The City of Bloomington

Nestled in the rolling hills of southern Indiana, Bloomington is a small city with big-city amenities, atmosphere and culture—home of the Little 500 bicycle race; the Lotus World Music & Arts Festival; the WonderLab Museum of Science, Health and Technology; one of America's 50 best farmers' markets;³ and one of the most sought after craft beers in America.⁴ As the site of IUB, Bloomington is also an ideal location to build a knowledge economy.

Bloomington residents appreciate world-class entertainment and cultural festivities, value community and environmental causes, and recognize the importance of higher education. Combine this with a commitment to recreational activities on the B-Line Trail, a passion for the arts as seen through the creation and development of the Bloomington Economic & Arts District, and a budding tech and life sciences sector, and Bloomington is clearly a community steeped in tradition but with an eye always on progress and sustainability.

Bloomington is the sixth most populous city in Indiana, with a population of approximately 80,307 residing in roughly 33,239 housing units in 2010.⁵ The City is fairly densely populated, with 3,474 people per square mile, compared to only 88 people per square mile, on average, nationwide.⁶

Bloomington supports a vibrant economy and a thriving business district composed of roughly 6,000 businesses.⁷ The City's business community is noted for excellence in pharmaceuticals, medical devices, technology, healthcare, and the arts. Its concentration of employment in the life sciences is six times greater than the U.S. average and growing. IU, IU Health, and IU Health Bloomington Hospital recently announced plans to collaborate to create a regional academic

³ "America's 50 Best Farmers' Markets," *Cooking Light*, http://www.cookinglight.com/healthy-living/travel/best-farmers-market, accessed March 2016.

⁴ Joe Satran, "17 Of The Most Sought-After Craft Beers In America, And How To Find Them," *Huffington Post*, February 18, 2015, http://www.huffingtonpost.com/2015/02/18/most-sought-after-beers_n_6702260.html, accessed March 2016.

⁵ "Quick Facts: Bloomington city, Indiana," United States Census Bureau, http://quickfacts.census.gov/qfd/states/18/1805860.html, accessed March 2016.

⁶ "Bloomington, Indiana," Sperling's Best Places, http://www.bestplaces.net/people/city/indiana/bloomington, accessed March 2016.

⁷ "Quick Facts: Bloomington city, Indiana," United States Census Bureau.

health center expected to employ thousands and expand opportunities for health sciences education and research.⁸

Growth in the technology sector is also booming, with an increase of over 80 percent in recent years. E-learning, bioinformatics, cybersecurity, the country's first School of Informatics, a first-of-its-kind Center for Sports, Media & Technology, and a planned downtown Certified Technology Park make Bloomington an emerging epicenter of technology.

The City of Bloomington is frequently heralded as a desirable place to live and work, ¹¹ and it has been the recipient of a number of awards recognizing its community assets and quality of life. Bloomington has been recognized by *Inc. Magazine* as one of "America's Best Cities for Doing Business" and as one of *Entrepreneur Magazine*'s Top 50 "Hottest Small Cities for Entrepreneurs." *Forbes Magazine* ranked Bloomington No. 3 in its "Best Places for Business Careers" feature and as a top city for work-life balance. ¹²

IUB (with 7,701 employees) is the sixth-largest employer in Indiana ¹³ and Indiana University Health Bloomington (with more than 2,200 employees) is the third-largest employer in Bloomington. Other leading employers include the Cook Group (3,330 employees), a medical device manufacturer that created the first modern heart stent. Cook Pharmica recently announced plans to invest \$28 million to add a new drug-filling line in its award-winning Bloomington manufacturing facility. ¹⁴ Baxter (with 1,100 employees), operates one of the largest contract manufacturing facilities for sterile pharmaceutical products in North America at its state-

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⁸ "IU, IU Health Bloomington Hospital announce new health complex," Indiana University, April 15, 2015, http://news.iu.edu/releases/iu/2015/04/hospital-iu-iuhealth.shtml, accessed March 2016.

⁹ "Technology," Bloomington Economic Development Corporation, http://comparebloomington.us/technology/, accessed March 2016.

¹⁰ "Certified Technology Park," City of Bloomington, http://bloomington.in.gov/certified-technology-park, accessed March 2016.

¹¹ Kathryn Dill, "The Best And Worst Cities For Work-Life Balance," *Forbes*, August 5, 2014, http://www.forbes.com/sites/kathryndill/2014/08/05/the-best-and-worst-cities-for-work-life-balance/#2d9159814215, accessed March 2016.

¹² "IU Rankings," Indiana University Bloomington, https://www.indiana.edu/about/rankings-statistics.html, accessed March 2016.

¹³ "State Profile: Largest Employers: Indiana," CareerOneStop, http://www.careerinfonet.org/oview6.asp?soccode=&id=1&nodeid=12&stfips=18&from=State, accessed March 2016.

¹⁴ J.K. Wall, "Cook Pharmica to hire 70 workers to expand drug-making capacity," *Indianapolis Business Journal*, July 20, 2015, http://www.ibj.com/articles/54097-cook-pharmica-to-hire-70-workers-to-expand-drug-making-capacity, accessed March 2016; *See also:* "Facility of the Year," Cook Pharmica, http://www.cookpharmica.com/why-us/facility-of-the-year/, accessed March 2016.

of-the-art 600,000 square foot BioPharma Solutions campus in Bloomington. ¹⁵ The City is also home to the largest limestone quarrier in the United States, Indiana Limestone Company. ¹⁶

Thanks to the contribution of these leading employers and others, the Bloomington Metropolitan Statistical Area boasted a gross metropolitan product of \$6.5 billion in 2010, making it the 255th largest metropolitan economy in the United States.¹⁷

In addition to these major employers, downtown Bloomington boasts more than 140 local and unique restaurants, bars, and coffee shops, seven local breweries, and a distillery. These attributes have led Bloomington to be named one of the "Top 5 Food Towns in the Midwest" by *Midwest Living Magazine* and the "7th fastest growing destination for wine and culinary enthusiasts in the nation" by Orbitz Research Travel.¹⁸

Potential residents and business owners recognize Bloomington's attributes—and the City's population is steadily increasing, with the City's growth (3.8 percent) higher than that of the United States as a whole (3.3 percent) from April 1, 2010 to July 1, 2014. ¹⁹ Moreover, Bloomington's population is younger than the national average, owing in part to the City's large number of university students. The median age of Bloomington residents is 23.4 years, compared to 37.2 years nationwide.²⁰

The educational needs of Bloomington residents—from K–12 through higher education—are also a factor in the City's broadband goals. The Monroe County Community School Corporation ("MCCSC") encompasses 21 schools, more than 11,000 students, and more than 800 teachers. Public schools in Bloomington consistently exceed statewide averages on standardized test scores, and nearly 87 percent of MCCSC graduates continue on to college. 22

¹⁵ "Baxter BioPharma Solutions," *Contract Pharma*, July 31, 2015, http://www.contractpharma.com/csd/profile/baxter-biopharma-solutions/view baxter-facility-bloomington-indiana-usa/19155, accessed March 2016.

¹⁶ "Our Story," Indiana Limestone, https://www.indianalimestonecompany.com/our-story/, accessed March 2016.

¹⁷ "Gross Metropolitan Product," Grevhill Advisors, https://grevhill.com/gross-metropolitan-product, accessed

¹⁷ "Gross Metropolitan Product," Greyhill Advisors, http://greyhill.com/gross-metropolitan-product, accessed March 2016.

¹⁸ "What Makes Bloomington, IN Unique?", Bloomington Economic Development Corporation, http://comparebloomington.us/quality-of-life/, accessed March 2016.

¹⁹ "QuickFacts: United States: Bloomington City, Indiana," United States Census Bureau, http://www.census.gov/quickfacts/table/PST045214/00,1805860, accessed March 2016.

²⁰ "Bloomington, Indiana," Sperling's Best Places.

²¹ "Monroe County Com Sch Corp," Indiana Department of Education Compass, http://compass.doe.in.gov/dashboard/overview.aspx?type=corp&id=5740, accessed March 2016. http://compass.doe.in.gov/dashboard/overview.aspx?type=corp&id=5740, accessed March 2016. https://compass.doe.in.gov/dashboard/overview.aspx?type=corp&id=5740, accessed March 2016. https://compass.doe.in.gov/dashboard/overview.aspx?type=corp&id=5740, accessed March 2016.



Figure 1: Bloomington and Surrounding Area²³

²³ Map of Bloomington, http://bloomington.in.gov/media/media/image/gif/9413.gif, accessed March 2016.

MCCSC supports a growing reliance on connectivity. The use of technology in the classroom and beyond is steadily increasing in the region. The school district has implemented a one-to-one technology initiative, and has issued iPads to all elementary and middle-school students. All high-school students received a tablet/laptop computer for the current academic year. Technology has become a staple in the classroom and the County intends for these devices to "serve as a transformational classroom tool for the students." ²⁴ Middle and high-school students are expected to take their devices home each evening, creating a need for high-speed connectivity for Bloomington residents.

This commitment to education continues beyond grade school, with 56.6 percent of persons over age 25 having attained a bachelor's degree or higher, compared to only 28.8 percent nationwide.²⁵ It is no surprise that *VentureBeat* designated Bloomington the seventh smartest town in America.²⁶ This level of educational attainment translates to a higher expectation of broadband connectivity.²⁷

Bloomington is home to several higher education institutions, including IUB, the flagship campus of the State's eight-campus university system, with 38,364 undergraduate students and 10,150 graduate students.²⁸ IU is a world leader in professional, medical and technological education. The University houses 20 top-ranked graduate programs, including Nonprofit Management and Environmental Policy and Management, which are each ranked number one in the country, according to U.S. News and World Report.²⁹ The vibrant surrounding community has earned its recognition as one of the "best college towns to live in forever."³⁰

As Bloomington continues to expand, its numerous local technical and scientific industries will likely also grow. Robust, citywide connectivity will support growth in new and bourgeoning high-

²⁴ "High School 1:1," Monroe County Community School Corporation, http://www.mccsc.edu/Page/3302, accessed March 2016.

²⁵ "Quick Facts: United States," United States Census Bureau, http://quickfacts.census.gov/qfd/states/00000.html, accessed March 2016.

²⁶ Sean Ludwig, "These are the 100 Smartest Cities in America," *VentureBeat*, June 25, 2013, http://venturebeat.com/2013/06/25/smartest-cities-in-america/, accessed March 2016.

²⁷ See, e.g. Ingrid Lunden, "Pew: 30% Of U.S. Adults Don't Have Broadband; 10% Use Smartphones As Sole Internet Access; 20% Have Zilch" (reporting "We've consistently found that age, education, and household income are among the strongest factors associated with home broadband adoption"), *Tech Crunch*, August 26, 2013,. http://techcrunch.com/2013/08/26/pew-30-of-u-s-adults-dont-have-broadband-10-use-smartphones-as-sole-internet-access-20-have-zilch/, accessed March 2016.

²⁸ "Fast Facts: Bloomington, Fall 2015," IU Fact Book, https://www.iu.edu/~uirr/reports/standard/factbook/2015-16/Bloomington/Fast Facts/Fast Facts, accessed March 2016.

²⁹ "Rankings & Campus Statistics," Indiana University Bloomington, https://www.indiana.edu/about/rankings-statistics.html, accessed March 2016.

³⁰Id.; see also: "Bloomington, Indiana," Livability, http://www.livability.com/in/bloomington, accessed March 2016.

tech industries. The expertise to advance these and other industries already exists in Bloomington, and the City's goal is to nurture an environment conducive to economic expansion.

World-class telecommunications infrastructure is needed to support this growing, educated population. The City has a number of communications service providers, including Comcast, AT&T, and Smithville Fiber. Indications are, however, that the local appetite and need for greater and more uniformly available broadband services both now and in the future cannot be met with current service levels.

IV. Project Goals

Respondents to this RFI should indicate whether and how their proposals serve the City's goals to:

- 1. Provide community-wide broadband by ensuring infrastructure is available to every Bloomington home, business, public facility, and private institution to enable residents, workers, and visitors the opportunity to access affordable, high-speed broadband connections to the Internet and other networks.
- 2. Respond to the needs of Bloomington's broadband user groups, including:
 - a. Healthcare providers and patients
 - b. The research and development community
 - c. K-12 and higher-education institutions
 - d. Large and small businesses
 - e. Bloomington City government
- 3. Pursue innovative models that enable community control, including, but not limited to:
 - a. Leasing City-built and -owned dark fiber to provide services
 - b. Partnering with the City to construct and operate an FTTP network
 - c. Contracting with the City to manage and provide services on a fiber network built, owned, and operated by the City
- 4. Offer non-discriminatory, open access to all users, service providers, content providers, and application providers connected to the citywide fiber network. Serving only limited areas of the City or specific types of customers is less desirable; the City seeks to provide

- complete community coverage. Further, the network should be usable via all standard commercial devices.
- 5. Offer unique services and speeds not currently provided in the City (e.g., gigabit-persecond (Gbps) speeds, symmetrical services, services that continue operating when commercial power fails, service level agreements, and direct connectivity between locations on the network).
- 6. Provide financial sustainability and identify ways for the City and prospective partners to share financial and operational risks to improve the financial sustainability of the network.
- 7. Respond to the needs of the businesses connected to the fiber network.
- 8. Provide cost-effective services for price-sensitive customers and flexible pricing plans to help lower the digital divide and ensure access to all City residents, so that no Bloomington residents are left behind.
- 9. Facilitate a local broadband marketplace that accepts, accelerates, and encourages competition.
- 10. Provide stakeholders with the broadband capacity, affordability, and local, regional, and national connectivity they need to compete successfully in the global marketplace.
- 11. Develop a scalable network that can adapt and expand to evolving community needs and circumstances.
- 12. Deliver municipal services and manage municipal operations more efficiently and effectively by leveraging the broadband network and other advanced technologies like sensors, cameras, and smart devices to transform the way existing City services are provided.
- 13. Offer innovative new municipal services that could improve the quality of life for Bloomington residents and businesses.
- 14. Select a partner that shares and reduces the City's risks.

For the network to have the intended economic and quality-of-life impacts, we consider both cost and availability of service to be important. We encourage responses that address both to maximize adoption of service.

All respondents must fully complete Appendices A, B, and C (including two signed copies of the Non-Disclosure Agreement) and fully comply with the instructions in Section VII.

V. General Network Design and Construction Parameters

The City is seeking a Partner willing to deliver game-changing services using a best-in-class technical approach. Respondents are urged to consider fully fiber-based architectures providing long-term scalability and reliability. It is important for broadband service to extend to new residents and businesses as Bloomington continues to grow in population, and network design and implementation should take these growth factors into consideration.

The following baseline technical attributes are preferred:

- Fully fiber-based connectivity to residential and business customers alike
- Fiber strand capacity capable of providing direct homerun connections to businesses and residential "power" users
- Fiber strand capacity and physical architecture (e.g., handhole placement, backbone routes, etc.) anticipating full deployment to all homes and businesses
- Minimal number of hops to the Internet backbone to reduce latency
- Backbone topology capable of supporting connections over diverse paths from one or more central hub locations to fiber distribution cabinets distributed throughout the City to facilitate high-availability service offerings
- Fiber distribution plant placed in underground conduit (as opposed to direct burial cable) to more readily facilitate repairs and capacity upgrades
- Aerial fiber distribution plant constructed on utility poles where feasible or beneficial
- Active components placed in environmentally hardened shelters and/or cabinets equipped with backup power generation and/or batteries, as appropriate, capable of sustaining services in the event of extended power outages
- Fiber path diversity to public facilities in order to maintain continuous service even if one path is broken
- Underground communications conduit pathways that can be used by the City for future scalability
- Fiber routes that are aligned with existing City conduit and coincide with planned City utility, roadway, and related capital improvement projects to reduce cost and minimize disruption where possible
- Redundancy and scalable capacity between the City network and the commercial Internet

VI. City Contributions and Assets

Although the City is in the early stages of defining its specific role in promoting enhanced broadband access for its businesses and residents, we recognize the importance of broadband in the continued prosperity and quality of life for those in our community.

Once we have selected our Partner(s), the City is prepared to promptly move forward with the partnership. An important component of any fiber build is franchising and permitting. The City will assign a point of contact (POC) for each Partner and/or its contractor(s), and commits to providing services to help prevent or lessen conflicts in the Partner's construction schedule. The City will work with its Partner(s) to facilitate the smoothest possible access for construction and installation of the network.

Upon request the City may also provide access to additional GIS resources and, where available, access to existing conduit infrastructure. Map layers include but are not limited to traffic, sewer, water, and storm-drainage facilities. Conduit size and available capacity vary.

The City has been investing in its own communications infrastructure for over a decade as part of the Bloomington Digital Underground (BDU) program. BDU has installed more than 11 miles of existing fiber in 17 miles of conduit. Respondents may leverage these existing assets to provide an FTTP network for City residents and businesses.

Respondents should also identify any existing assets they may have in the Bloomington area and how they intend to leverage those for this project. Partners may be asked to pay franchise fees to the City and pole attachment fees to the appropriate utility. Respondents should consider whether they propose to offset the fees with in-kind contributions, including conduit and dark fiber.

VII. RFI Response Requirements

The City of Bloomington requests the following information—in as much detail as is practicable—from respondents. All responses must adhere to the following response requirements and page requirements. All responses must follow the exact order below and use the appropriate response headers. Start a new page for each response header. Failure to follow these instructions may result in rejection of the response.

- 1. **Cover Letter:** Please include company name, address of corporate headquarters, address of nearest local office, contact name for response, and that person's contact information (address, phone, cell, email, other). Keep response to one (1) page.
- 2. **Business Model Summary:** Summarize the business model you intend to use for the partnership. This should be a concise explanation of the key components of your business

- model, including but not limited to the division of network and operations responsibility and ownership. Keep response to two (2) pages.
- 3. **Affirmation:** Affirm that you are interested in this partnership and address the core project goals and requirements listed above (Sections IV and V). List each goal and requirement with a brief statement of how you will comply. If you cannot meet any of those requirements, indicate the requirements to which you take exception, and provide an explanation of the exceptions. Keep response to no more than three (3) pages.
- 4. Experience: Provide a statement of experience discussing past performance, capabilities, and qualifications. Identify other networks your firm has designed, built, maintained, or operated; include the levels of broadband speed, availability, and adoption among different categories of end users and unique capabilities or attributes. Discuss partnerships with other service providers, government, or nonprofit entities you have undertaken, particularly any involving dark fiber leasing. Describe the nature of the projects and your firm's role. For entities currently providing communication services in or near Bloomington, describe your current service footprint in the City, including a description of the type of infrastructure and services you currently offer and the technology platform(s) used. Explain how your firm is a suitable partner for this project. Keep to no more than two (2) pages.
- 5. **Technical and Operations:** At a high level, summarize the technological and operational approach you would use for this project.
 - a. How would you use technology to meet the City's goals? Keep response to one-half (½) page.
 - b. What approach would you use to interconnect with the Internet and other public networks? Keep response to one-half (½) page.
 - c. How would you perform network management? Keep response to one-half (½) page.
 - d. Under what scenarios would you require route diversity or other special features in the City fiber? At what sort of facility (or facilities) would you place network electronics? Keep response to one-half (½) page.
 - e. Provide a proposed network diagram. Keep response to one (1) page.
 - f. Describe proposed peering capacity and policies to support services. Keep response to (1) page. Please also provide a single-page diagram of proposed peering relationships (e.g., Netflix, Amazon, IUB, other).

- 6. **Business Structure:** Summarize the business approach you would use for the project. How would your business plan help to meet the City's goals? What are the key assumptions? What are your main areas of risk, and how can the City help reduce the risks? What are the City's main areas of risk, and how will you reduce the risk to the City? Keep response to no more than three (3) pages. Also complete Appendices A and B to clarify areas of responsibility.
- 7. **Open Access:** If you currently operate communications facilities, indicate whether they are operated on an open-access basis. Describe whether and, if so, how you would support open access to infrastructure in the City. Keep response to one (1) page.
- 8. **Schedule:** Describe your proposed schedule for implementing service. Offer a timeline with key milestones. Would you be able to begin service before the entire network is constructed? Are there areas of the City you would recommend be constructed first? What milestones would you be able to achieve by 2018? Keep response to two (2) pages (one for response, one for schedule).
- 9. **Maintenance:** If you are proposing to perform fiber network maintenance, describe your ability to perform maintenance on an ongoing and as-needed basis. Provide estimates of the operating cost of maintaining the fiber optic outside plant for a citywide fiber network and include your main assumptions. If you are not performing maintenance, who is? Keep response to one (1) page.
- 10. **Privacy:** Describe your ability to provide secure network service or infrastructure that complies with public safety and other security and privacy regulations and requirements. Keep response to one (1) page.
- 11. **Financing and Funding:** List any requirements the City must meet for you to partner with the City on this project by completing Appendix B Financial Responsibilities Questions.
 - Please also provide a one-page flow chart that shows the flow of funds between all parties in your response. Include all sources and uses of funds.
 - If you do not address this question, it will be assumed that you are interested in the partnership but have no financial requirements whatsoever of the City. **Appendix B** *must* **be submitted electronically in its native PDF format.** Please keep response to the guidelines of the separately attached PDF, plus the one-page flowchart.
- 12. **Services:** Describe the service options you plan to offer over this network (for example, data only; voice and data; a triple play of voice, data, and cable television; etc.). What download/upload or symmetrical speeds would you offer and guarantee to end users?

How will your residential and business offerings differ? What types of service level agreements (for lit services: availability and packet delivery; for dark fiber: repair time) would you be prepared to offer? If you plan to use BDU fiber, what types of service level agreements would you need? Keep response to two (2) pages.

- 13. **Pricing:** Provide your approach to pricing the proposed services. For managed services, please describe factors impacting non-recurring costs (estimated fiber path distances, equipment redundancy, etc.); recurring costs for varying capacity levels; and any key technical assumptions upon which prices are based. For dark fiber offerings, please describe desired pricing models. Keep response to two (2) pages.
- 14. Local Participation and Economic Development: Provide a statement of how your proposed participation would help the City's economic development. Describe your interests and plans to hire local contractors and providers in the City of Bloomington, and how your participation would help local job creation. Describe your relationships with local businesses in the City, if any, as well as your interest and plans to engage them in this project. Keep response to no more than three (3) pages.
- 15. **References:** Provide a minimum of three (3) references, including contact information, from previous contracts or partnerships. Keep response to two (2) pages.

Following the response above, please include your completed Appendices A and B. Keep Appendix A in its native Microsoft Excel format. Keep Appendix B in its native PDF format. Please provide *two* signed copies of the Non-Disclosure Agreement.

VIII. RFI Response Process

Letter of Intent

All interested respondents are asked to submit a letter of intent via email by April 14, 2016 to Julie Martindale, Purchasing Manager, City of Bloomington (martindi@bloomington.in.gov).

Questions

Questions related to this RFI should be emailed to martindj@bloomington.in.gov no later than 4:00 PM EST on April 21, 2016. The City will post responses on its website, at http://bloomington.in.gov/broadband-rfi.

Response Deadline

Final RFI submissions must be received in electronic form by 4:00 PM EST on May 12, 2016. Please send RFI response by email in PDF and Excel (Appendix A) format to martindj@bloomington.in.gov.

Please identify any proprietary and/or confidential information as such.

Summary of RFI Process Deadlines

The following is the schedule for responding to this RFI. The schedule is subject to change:

March 31, 2016 - RFI opened

April 14, 2016 - Deadline for submitting letter of intent to respond to RFI

April 21, 2016 – Deadline for submitting questions

April 28, 2016 – City posts responses to questions (http://bloomington.in.gov/broadband-rfi)

May 12, 2016 – RFI responses due

The City of Bloomington thanks you in advance for your thoughtful response.

IX. Personal Presentations

At its discretion, the City may request that vendors and other parties that provide a timely response to this RFI make an individual and personal presentation to better explain information or solutions identified in the RFI. These presentations, if requested by the City, shall be held at a time and place of mutual convenience.

Appendix A: Responsibility Matrix

Appendix A is included as a separate file.

Note that Appendix A *must* be submitted in its native Microsoft Excel format. Failure to follow submission instructions may result in rejection of the response.

Appendix B: Financial Responsibilities Questions

Appendix B is included as a separate file.

Note that Appendix B *must* be submitted in its native PDF format. Failure to follow submission instructions may result in rejection of the response.

Appendix C: Non-Disclosure Agreement

Please provide two signed copies of the following Non-Disclosure Agreement.

MUTUAL CONFIDENTIALITY AND NONDISCLOSURE AGREEMENT

	This Mutual Confidentiality and Nondisclosure Agreement ("Agreement"), is entered into				
this	day of _	, 20, by and between	and		
		$_$ as part of the City of Bloomington's ("City") Fiber-to-the-Premises		
Request for Information ("RFI"). The parties agree that the following terms and conditions apply					
when	a party ("Disclosing P	arty") discloses Confidential Information to the	other party ("Receiving		
Party").				

In consideration of the parties' discussions in connection with a proposed relationship between the parties (the "Relationship") and any access a Receiving Party may have to Confidential Information of a Disclosing Party, the parties hereby agree as follows:

- Confidential Information. "Confidential Information" means information, including, without limitation, that relates to Disclosing Party's or its subsidiary's or affiliate's products, software, research, development, inventions, processes, techniques, know-how, designs, drawings, programs and codes, or other technical information or data; names, contacts or other information regarding any customers or prospective customers; any customer specific data, including, without limitation, financial data, statistics, processes, and personal information of any customer's constituent; operations, strategies, programs, marketing methods and plans, business methods and plans, financial data or other records related to Disclosing Party's business; terms of engagements or other third party business relationships; or other information that may be disclosed as a result of or in connection with discussions regarding the RFI and subsequent dealings, and that should reasonably have been understood by the Receiving Party, because of legends or other markings, the circumstances of disclosure or the nature of the information itself, to be proprietary and confidential to the Disclosing Party. Confidential Information further includes intellectual property rights, including, but not limited to, all patent, patent registration, copyright, trademark, and trade secret rights of Disclosing Party and its affiliates. Confidential Information may be disclosed in written or other tangible form (including magnetic media) or by oral, visual or other means.
- 2. Maintenance of Confidentiality. For a period of 24 months, the Receiving Party agrees (i) to hold the Disclosing Party's Confidential Information defined above in strict confidence and to take all reasonable precautions to protect the Confidential Information (including, without limitation, all precautions the Receiving Party employs with respect to its own confidential materials), (ii) not to divulge any such Confidential Information or any information derived therefrom to any third person (including, but not limited to, any affiliated person or entity), except to the Receiving Party's attorneys, accountants or professional advisors and partners who have a need to access the Confidential Information in connection with the Relationship and to take all necessary precautions to prevent other disclosures, (iii) not to make any use whatsoever at any time of such Confidential Information except to further the purposes of the Relationship, (iv) not to remove or export from the United States or re-export any such Confidential Information or any direct product thereof, and not to copy or reverse engineer any

such Confidential Information. Any affiliate, subsidiary, agent, consultant or employee given access to any such Confidential Information by the Receiving Party must have a legitimate "need to know" and shall be similarly bound by this Agreement. In addition, any affiliate, subsidiary, agent, consultant or employee who may receive, have access to, or use any such Confidential Information shall, at the Disclosing Party's request in the future, execute a copy of this agreement (or separate Non-Disclosure Agreement as the Disclosing Party may request), acknowledging that they are bound by the obligations of the non-disclosure, non-use, and return of the Confidential Information provided for in this agreement. Without granting any right or license, the Disclosing Party agrees that the foregoing clauses (i), (ii) and (iii) shall not apply with respect to any Confidential Information that the Receiving Party can document (a) has been made generally available to the public through no improper action or inaction by the Receiving Party or any affiliate, agent, consultant or employee, (b) was in its possession or known by it prior to receipt from the Disclosing Party, or (c) was rightfully disclosed to it by a third party, provided that such third party is not bound by an obligation of confidentiality to the Disclosing Party or not otherwise prohibited from transmitting such information to the Receiving Party. For purposes of the immediately preceding sentence, the terms "availability," "possession," "disclosure," "development" or "knowledge" of information combined, synthesized or used by the Disclosing Party in a particular manner are meant to incorporate the various pieces of information as they are combined, synthesized or used. Such terms are not meant to include the availability, possession, disclosure, development or knowledge of various pieces of information that are not so combined, synthesized or used. The Receiving Party may make disclosures required by law; provided that the Receiving Party uses its best efforts to limit any such disclosure and to obtain confidential treatment or a protective order and has provided the Disclosing Party with prompt notice of any requested disclosure so that the Disclosing Party may participate in attempting to limit such disclosure or to seek confidential treatment. Nothing contained in this Agreement shall be construed as granting or conferring any rights by license or otherwise in any Confidential Information disclosed.

3. Access to Public Records Act. The City qualifies as a public agency under the terms of Indiana's Access to Public Records Act (hereafter "Act", found at Ind. Code § 5-14-3, et. seq.). As such, the parties acknowledge that any records held by the City are potentially subject to disclosure under the Act, notwithstanding any other provision of this Agreement. When, pursuant to the Act, the City receives a properly formulated request for Confidential Information, as that term is defined in this Agreement, the City will withhold any records that qualify as confidential records pursuant to Indiana Code § 5-14-3-4(a) or any other applicable statute or ruling. When, pursuant to the Act, the City receives a properly formulated request for Confidential Information, as that term is defined in this Agreement, the City will withhold any records that qualify as discretionary records pursuant to Indiana Code § 5-14-3-4(b) or any other statute or ruling. When, pursuant to the Act, the City receives a properly formulated request for Confidential Information, as that term is defined in this Agreement, the City will be obligated to release any records that do not qualify as either confidential or discretionary. If the City is obligated to release Confidential Information pursuant to the Act, the City will notify the Disclosing Party of the request and the records to be released prior to releasing the records to the requestor.

- 4. Return of Confidential Information. The Confidential Information shall at all times remain the sole property of the Disclosing Party, and immediately upon (i) the decision by either party not to enter into or continue the Relationship contemplated hereby, or (ii) a request by the Disclosing Party at any time (which will be effective if actually received or three days after mailed by certified mail, return receipt requested, postage prepaid to the Receiving Party's address set forth herein), the Receiving Party will turn over to the Disclosing Party all Confidential Information of the Disclosing Party and all documents or media containing any such Confidential Information and any and all copies or extracts thereof. However, the parties acknowledge that when the City, as a public entity, is legally required to maintain copies of records in order to comply with the City's record retention obligations, the City will not be able to return all records to the Disclosing Party. The Receiving Party understands that nothing herein (a) requires the disclosure of any Confidential Information of the Disclosing Party, which shall be disclosed if at all solely at the option of the Disclosing Party (in particular, but without limitation, any disclosure is subject to compliance with laws and regulations), or (b) requires the Disclosing Party to proceed with any proposed transaction or relationship in connection with which Confidential Information may be disclosed.
- 5. Confidential Relationship. Except with the permission of the other party and/or to the extent required by law, neither party shall disclose the existence or subject matter of the negotiations or business relationship contemplated by this Agreement.
- 6. No Implied Warranty. Each party hereto acknowledges that neither it nor any of its officers, directors, employees or agents makes any express or implied representation or warranty as to the completeness of the Confidential Information. The Receiving Party shall not be entitled to rely on the completeness of any Confidential Information, but shall be entitled to rely solely on such representations and warranties regarding the completeness of the Confidential Information as may be made to it in any definitive agreement relating to the Relationship, subject to the terms and conditions of such agreement.
- 7. No Implied Licenses. Except as otherwise expressly permitted hereunder, no license under any trade secret, patent, patent application, industrial design, trademark, copyright, mask work, confidential process, formula, plan, computer program, data or other valuable Confidential Information or know-how is granted to the Receiving Party or can be implied by disclosure to the Receiving Party by the Disclosing Party of any of the Disclosing Party's Confidential Information hereunder.
- **8. No Waivers.** No failure or delay in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any right, power or privilege hereunder.
- 9. Authority to Execute and Freely Executed. In entering into this Agreement, each party represents and warrants that it does so freely and voluntarily. Each party represents and warrants that it has full power and authority to enter into and execute this Agreement and

each person signing below represents and warrants that he/she has full power and authority to execute this Agreement on behalf of its respective party.

- 10. Irreparable Harm. The Receiving Party acknowledges and agrees that due to the unique nature of the Disclosing Party's Confidential Information, there can be no adequate remedy at law for any breach of its obligations hereunder, that any such breach may allow the Receiving Party or third parties to unfairly compete with the Disclosing Party resulting in irreparable harm to the Disclosing Party, and therefore, that upon any such breach or any threat thereof, the Disclosing Party shall be entitled to seek appropriate equitable relief in addition to whatever other remedies it might have at law and to be indemnified by the Receiving Party from any loss or harm, including, without limitation, attorney's fees, in connection with any breach or enforcement of the Receiving Party's obligations hereunder or the unauthorized use or release of any such Confidential Information as set forth herein. The Receiving Party will notify the Disclosing Party in writing immediately upon the occurrence of any such unauthorized release or other breach of which it is aware. However, this paragraph shall not apply when the Receiving Party, in good faith, determines that it is under a legal obligation to release the Disclosing Party's Confidential Information.
- 11. Severability. In the event that any provision or provisions of this Agreement is held by a court or other tribunal of competent jurisdiction to be illegal, invalid or unenforceable, such provision or provisions shall be limited or eliminated to the minimum extent necessary so that this Agreement shall otherwise remain in full force and effect.
- Out of or relating to any interpretation, construction, performance or breach of this Agreement shall be exclusively governed by Indiana law without respect to conflict of law provisions. The parties further agree to submit to personal jurisdiction in the courts of the State of Indiana as such courts shall serve as the exclusive venue for all dispute resolution. This Agreement supersedes all prior discussions and writings and constitutes the entire agreement between the parties with respect to the subject matter hereof. No waiver or modification of this Agreement will be binding upon either party unless made in writing and signed by a duly authorized representative of such party and no failure or delay in enforcing any right will be deemed a waiver.
- 13. Notice. Any notice, request, or other communication required or permitted to be given under this agreement shall be in writing and shall be mailed by certified mail, return receipt requested, postage prepaid, addressed to the parties as follows:

City of Bloomington	401 N. Morton Street
ATTN: Legal Department	Bloomington, IN 47404

All notices and other communications shall be deemed to be given at the expiration of three days after the date of mailing, conditioned upon executed return receipt. The address of a party to which notices or other communications shall be mailed may be changed from time to time by giving written notice to the other parties.

City of Bloomington | FTTP RFI

This Agreement may be executed by manual, electronic, or facsimile signatures and in any number of counterparts, each of which will be deemed an original and all, which together will constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year set forth above.

CITY OF BLOOMINGTON	
John Hamilton, Mayor	
RFI RESPONDENT	
Signature	Name of Entity
Printed Name and Title	